

(Mintezole®) for hookworms; Mintezole for whipworms and *S. stercoralis*; metronidazole (Flagyl®) for *E. histolytica* and giardiasis; niclosamide (Yomesn®) for tapeworms, and stibophen (Fuafuadin®) or niridazole (Ambihar®) for schistosomiasis. Sometimes repeated therapy is necessary. For pinworms, simultaneous therapy of all the family or group members is necessary as well as a repeated treatment two weeks after the initial treatment.

Often, the need for active treatment in parasitic infestation is relative, and withholding treatment in asymptomatic cases is recommended because many are self-limiting. However, it should be noted also that symptoms often fluctuate, varying from a very severe condition which leads patients to seek medical attention to a completely asymptomatic one. In children, such a fluctuating and insidious course may disturb and delay schooling and social activities. Those children often have multiple infestation, high eosinophile counts and past history of symptoms and signs. It is especially in those circumstances that the treatment of a seemingly self-limiting or relatively asymptomatic infestation should be given serious consideration. Also, we strongly believe that at least in certain communities and locations every practicing physician should keep abreast of the problem of parasitic infestation and its eradication as an integral part of medical practice.

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## Graphic Analysis of Obstetric Labor

THE DIAGNOSIS of prolonged labor using only elapsed time involves the difficulty that some serious labor observations may be overlooked by such a coarse criterion. Whereas some normally progressive and uncomplicated labors may last longer than defined time limits, some ominous labor patterns are potentially so hazardous that they should be recognized well before any such time limit is reached. One study has shown that 10 percent of all labors under 20 hours considered normal clinically were abnormal when progress of labor was plotted graphically, and that almost 50 percent of patients diagnosed as having abnormal clinical labor had normal patterns of

cervical dilatation. In order to provide a more objective method to better monitor labor, Friedman has developed a simple method of graphically displaying the progress of labor judged by time, cervical dilatation and station of the presenting part.

This method records observations that the physician obtains in any event and plots these observations on square-ruled graph paper with hours of labor as horizontal coordinates, cervical dilatation as vertical coordinates on the left, and station of descent as vertical coordinates on the right. The method is simple to apply in everyday obstetric practice and is fully described in the references listed.

Six major disorders of labor are readily characterized by use of this method. These can be grouped in three categories: (1) *prolonged latent phase*; (2) *protraction disorders*: (a) protracted active-phase dilatation and (b) protracted descent, and (3) *arrest disorders*: (a) prolonged deceleration phase, (b) secondary arrest of dilatation and (c) arrest of descent. Each of these disorders can be further related to cause, response to treatment, and prognosis. Each disorder involves its own preferred approach to management. In general, therapeutic rest is indicated for prolonged latent phase; support and expectancy are preferred for protraction disorders; cesarean section is indicated in arrest disorders complicated by disproportion, and oxytocin stimulation is reserved for arrest disorders occurring without disproportion.

Use of the graphic analytic technique adds an important new dimension to the diagnostic and therapeutic capabilities of physicians caring for obstetric patients in labor. This method is recommended for application in everyday practice and allows for improved teaching and learning in residency training programs.

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## Endometrial Sampling

RECENTLY THERE HAS BEEN a plethora of reports indicating increased incidence of endometrial cancer in patients receiving estrogen therapy. The need for a simple and accurate method of endometrial sampling has become apparent. Since 1943

various techniques have been used to obtain endometrial tissue for diagnosis, including aspiration, jet-washing and endometrial biopsy studies. Since the classical method—dilatation and curettage—requires admission to hospital, general anesthesia and considerable cost to the patient, clinicians have been anxious to find a reliable office procedure to obtain endometrial tissue in the evaluation of abnormal bleeding or for endometrial dating. Currently the jet-washing technique as described by Gravlee and the suction endometrial biopsy as described by Novak are the most popular.

It seems that, overall, endometrial biopsy study is a superior technique. Jet-washing is simple and very well tolerated by patients without anesthesia. Statistically, however, there is a larger percentage of missed endometrial carcinoma (9 percent) than with endometrial biopsy (7.9 percent). In addition, the jet-washing technique is consistently less accurate than endometrial biopsy in the diagnosis of adenomatous hyperplasia and in endometrial dating. Both techniques have a 12 to 16 percent incidence of obtaining insufficient tissue for diagnosis. Therefore, even though the suction biopsy technique is slightly more uncomfortable to the patient, it seems to be superior.

Currently, there is a variant technique of endometrial biopsy using vacuum aspiration as described by Vabra. After extensive clinical trials in Europe, it seems to be slightly more accurate than the routine suction biopsy and significantly more effective as a therapeutic modality in evacuation of uterine tissue.

Since both suction biopsy and jet-washings have a substantial incidence of obtaining insufficient tissue for diagnosis of endometrial cancer, a negative or inconclusive result should not be relied upon. For this reason, many clinicians are returning to dilatation and curettage as the primary procedure. In an outpatient setting, dilatation and curettage can be done under paracervical block anesthesia with reduced expense to the patient and the security that a second procedure will not be necessary.

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## Hypertension in Children and Adolescents

HYPERTENSION has generally been considered an adult problem, and little attention has been focused on the incidence of this disorder in either children or adolescents. The recording of blood pressure as a routine part of a physical examination may be viewed as less important during childhood or adolescence than in later years. Information concerning the mechanisms, end points and therapy of essential hypertension has been developed from studies of adult populations, so that little is known about this entity in young people. Recently, however, two developments have taken place which should increase our concern about hypertension in children and adolescents: (1) observations that the siblings of adults with known essential hypertension, regardless of their age, are more likely to have elevated blood pressure levels than the general population and (2) hypertension in adolescents is being discovered more frequently through community blood pressure screening programs.

Primary hypertension in children is rare; secondary causes of hypertension in childhood usually involve abnormalities of renal development and function, but may include coarctation of the aorta, adrenal tumors and disorders of the central nervous system. The incidence of primary hypertension in adolescents is unknown, although it is probably more frequent than hitherto suspected. A search for remedial causes of hypertension in adolescents with elevated blood pressure still is indicated.

The flush technique may be used to record blood pressure in infants. Blood pressure measurements should be a routine part of physical examinations in every child more than 2 years old. The blood pressure cuff must be carefully selected in order to obtain accurate readings. The inner rubber bag should be wide enough to cover two thirds of the length of the arm and three quarters of the circumference of the upper arm or thigh while leaving the antecubital or popliteal fossa free.

There are no major differences in blood pressure levels between boys and girls of the same age. Although precise information concerning the normal range of blood pressure in children and teenagers is not available, the figures shown in Table 1 for the 95th percentile for systolic and diastolic pressures serve as an adequate guide to unsafe levels for any age.